ALTERATIONS TO THE CLAIMS

Claims 1-8, 17-22, 25 and 28-32 were pending in the present application prior to this response. Applicant has amended Claims 1 and 25, and deleted Claims 28-32.

REMARKS

The Examiner has rejected Claims 1-8, 17-22, 25 and 28-32 of the present invention under 35 U.S.C. §103(a), based on the contention that those claims are unpatentable over one or more of U.S. Patent No. 6,094,767, issued to Iimura (Iimura '767), in view of U.S. Patent No. 6,251,127, issued to Biel (Biel '127), or over PCT Publication No. WO 98/27891 for Massholder (Massholder '891) in view of Biel '127. Applicant respectfully traverses the Examiner's rejections. Solely to expedite the prosecution of the application, however, Applicant has amended the claims of the application so as to better define the present invention and to, in turn, overcome the Examiner's rejections.

Specifically, Applicant has amended Claims 1 and 25 (the sole remaining independent claims) to clarify that the patch is capable of being positioned directly adjacent the surface of a patient, without causing abrasion to that surface. Such a device is not taught, disclosed or suggested by any of the references cited by the Examiner.

The Examiner relies, *inter alia*, on the combination of Iimura '767 in view of Biel '127 to show the present invention. The Examiner notes, however, that Iimura '767 fails to disclose the use of an applicator that includes a patch for positioning on a skin, and attempts to overcome that failing by combining Iimura '767 with Biel '127, which does show a patch configuration. The Iimura '767 and Biel '127 references, however, would never be combined by one of ordinary skill in the art, because they utilize photocatalytic materials in completely different manners.

Photocatalytic materials comprise a broad range of products that evoke a response upon

application of a particular (or not-so-particular) wavelength of light. Each of Iimura '767 and Biel '127 disclose different kinds of photocatalytic materials.

Iimura '767 discloses a cleaning apparatus that includes a photo-activating catalyst. Specifically, Iimura '767 includes "photo activated semi-conductors" such as titanium oxide, tungsten oxide, zinc oxide, zinc sulfide and tin oxide. (Iimura '767, Col. 6, Lines 15-23). Semi-conductive photo-catalytic materials, as is known in the art, create a field of hydroxide ions surrounding the device, which ions then act as the sanitizing agent of the device. Thus, Iimura '767 relies upon the product of the photocatalytic reaction to sanitize the particular area being treated.

Biel '127, on the other hand, operates in a completely different manner. First, a photocatalytic material is applied to an area to be treated, and thereafter light is applied to treat the wound area. The photocatalytic material itself acts as the sanitizing agent in this case, such that, once within the cells of a patient, the dye acts to "cause intracellular enzyme deactivation of the . . . cells." (Biel '127, Col. 3, lines 29-30).

The functional requirements of Biel '127 are hardly surprising. Biel '127 discloses a method for sanitizing that can be used within surgical-type environments on sensitive or damaged tissue areas. The application of the photocatalytic dye, such as methylene blue or toluidine blue, to the skin itself ensures the gentle and non-abrasive application of the photocatalytic materials. Thus, the direct and non-abrasive application of photocatalytic materials is essential to the operation of the device in biel '127.

Such care is not taken into account in Iimura '767, nor would it be necessary given the intended applications. Iimura '767 discloses a brush-like apparatus for, essentially, scrubbing a surface with hydroxide ions. Iimura '767 specifically teaches that the device is intended to be

used without any chemical agents whatsoever. (Iimura '767, Col. 2, lines 13-17). The brush device is described as being used with floors, teeth and other resilient and non-sensitive areas. It is elementary that the application of the hydroxide-sanitation field is effected in part through the scrubbing motion of the device.

Iimura '767 fails to recognize the application of the device to sensitive wound areas, such as are described in the present application and especially relative to Fig. 7 of the present invention. Instead, Iimura '767 teaches away from such an application, because of the use of a brushing application technique. Such a technique would only serve to damage sensitive healing tissues.

Further, Iimura'767 functions so differently from the device in Biel '127, as to render the two references functionally uncombinable. Since Iimura '767 sanitizes a surface using a field of hydroxide ions created by the semi-conductive material, Iimura '767 relies upon the hydroxide field generated as a product of the photocatalytic reaction to produce the cleaning effect. The field allows the brushing technique to be utilized in Iimura '767, as the sanitizing element of the invention is external to the photocatalytic material, extending beyond the surface of those elements to the surface being brushed.

Biel '127, on the other hand, requires the direct contact of the photocatalytically activatable material and the surface being treated. Thus, one of ordinary skill in the art would never look to the teachings of Biel '127, showing a patch configuration for direct surface application, especially since Iimura '767 teaches the use of harsh, abrasive bristles, while Biel '127 teaches the application of a substance to wounded areas of a patient.

Based on the above, Applicant submits that Iimura '767 and Biel '127 are essentially non-analogous references. Further, Applicant submits that Iimura '767 fails to teach, disclose or

suggest the present invention, as Iimura '767 fails to even contemplate the direct application of the device to an area, wherein no abrasion is communicated. Thus, Claims 1 and 25, as amended above, should now be in condition for allowance. Similarly, the remaining claims in the application, Claims 2-8 and 17-22, all depend therefrom, and should also be in condition for allowance. Therefore, reconsideration and passage to allowance of Claims 1-8, 17-22 and 25 is respectfully requested.

Should anything further be required, a telephone call to the undersigned at (312) 226-1818 is respectfully solicited.

Respectfully submitted,

FACTOR & PARTNERS, LLC

Dated: June 18, 2003

Jacob D. Koering
One of Applicant's Attorneys

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Patent Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on June 18, 2003.

Jacob D. Koering

Name of Applicant, assignee, applicant's attorney or Registered Representative

Signature